WISCONSIN ENDANGERED RESOURCES REPORT #122 STATUS OF THE AMERICAN MARTEN IN WISCONSIN PERFORMANCE REPORT, 1 JULY 1998 THROUGH 30 JUNE 1999 By Adrian P. Wydeven, James E. Ashbrenner, & Jane E. Wiedenhoeft

SUMMARY

A total of 19 marten were detected along 79.4 miles of survey transects in the Nicolet National Forest in winter 1998-1999. Marten per hundred miles was almost double the rate detected last year (23.9 vs. 12.2 marten). No marten transects were run in the Chequamegon National Forest during the 1998-1999 season.

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STATUS OF THE AMERICAN MARTEN PERFORMANCE REPORT

July 1, 1998 – June 30, 1999

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Job: 106.2.1 Monitor population

106.2.2 Determine recovery levels

106.2.3 Enhance population

106.2.4 Communications

Background: American marten (Martes americana) also known as pine marten, were extirpated from Wisconsin in the 1920's, and were listed as a state endangered species in 1972. Martens were reintroduced to the Nicolet National Forest in northeast Wisconsin between 1975 and 1983 (172 martens released), and in the Chequamegon National Forest in northwest Wisconsin between 1987-1990 (139 martens released).

The 1986 Pine Marten Recovery Plan for Wisconsin set a goal of 300 martens for the Nicolet, and release of 100 martens in the Chequamegon National Forest. These goals were probably achieved soon after 1990, but marten numbers have not expanded much beyond the refuge areas on both national forests originally designed for fisher (Martes pennanti). Annual monitoring will need to continue to assess the marten population and determine the need for additional stocking.

JOB 106.2.1 MONITOR POPULATION

Standardized survey routes to assess marten abundance and distribution were established in the Nicolet National Forest in 1983 and in the Chequamegon National Forest in 1991. Track counts were done annually along 3-5 routes in the Nicolet, and 3 routes in the Chequamegon National Forest following methods described by Ashbrenner (1994). Because of logistical problems, and lack of suitable tracking conditions, surveys were not completed in the Chequamegon National Forest in winter 1998-1999.

Results and Discussion:

Surveys were conducted from late December to late January in the northern Nicolet National Forest at snow depths of 5 to 21 inches. Nineteen marten were detected along 3 transects covering 79.4 miles (Table 1). The rate of marten detection/100 miles was twice as high this year as in 1997-1998 (23.9 vs. 11.9). The average rate of martens along survey routes has been 12.3/100miles for the last 3 years.

The ratio of marten to fisher in 1999 was 1 marten:1.2 fisher, compared to 1 marten:2.2 fisher last year, and 1 marten:2.7 fisher for the previous 3 years. Fisher may be declining somewhat due to more liberal harvest in areas outside the refuge zones, but marten seem to be increasing.

JOB 106.2.2 DETERMINE RECOVERY LEVELS

No additional work was done in this area in the 1998-1999 study period.

JOB 106.2.3 ENHANCE POPULATION

No stockings of marten have been done since 1990.

JOB 106.2.4 COMMUNICATION

American marten surveys were published in the <u>Wisconsin Wildlife Surveys</u> report (Wydeven, et al 1999), and marten observations were reported in <u>Wisconsin Wildlife Surveys</u> under Rare Mammal Observations (Wydeven and Wiedenhoeft 1999). Discussions on marten status and management were also held at the following: Great Lakes furbearer managers September 15, 1998; Carnivore track training December 5-7, 1998 (32 people); and Midwest Furbearer Workshop at Siren April 27-28, 1999.

Literature Cited

Ashbrenner, J. E. 1994. Distribution of marten in the Nicolet National Forest 1994. Wisconsin Wildlife Surveys. 4(1): 96-102.

Wydeven, A. P. and J. E. Wiedenhoeft. 1999. Rare mammal observations 1999. Wisconsin Wildlife Surveys. 9(2): 46-48.

Wydeven, A. P., J. E. Wiedenhoeft, and J. E. Ashbrenner. 1999. American marten surveys in northern Wisconsin. Wisconsin Wildlife Surveys. In Press.

Table 1. Furbearer track observations along marten survey routes in northern portions of the Nicolet National Forest, winter 1998-1999.

Number of Tracks Observed								
	Route	Snow	Miles					
Date	No.	Depth (in.)	Run	Marten	Fisher	Coyote	Bobcat	Other
12/28/98	1	5.5	29.4	9	10	12	2	1 fox
								2 otter
1/4/99	2	12	21.5	8	5	6	0	
1/29/99	3	19.5	28.5	2	7	4	2	2 fox
								3 otter
Total			79.4	19	22	22	4	3 fox 5 otter
1998 – 1999 (route		23.9	27.7	27.7	5	3.8 fox 6.3 otter		
1997 – 1998 tracks / 100 mi (route 1-3)				11.9	26.2	41.6	2.4	2.4 fox 3.6 otter
1996 – 1997 tracks / 100 mi (route 1-3)				13.8	37.9	36.8	5.7	4.6 fox 2.3 otter 2.3 porcupine 1.1 bear
1995 – 1996 tracks / 100 mi (route 1-3)				11.0	36.7	11.0	2.8	11.9 fox